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ABSTRACT

Qualitative evaluation and quantitative evaluation are discussed, examining how the perspective of each can and should create a critical debate that encourages inquiry instead of hostility. To achieve the major goal of linking evaluation information to the organization's culture, the evaluator needs to use multiple methods in a responsive, issue-raising, contextually sensitive approach. While some evaluators and researchers propose that the qualitative and quantitative approaches cannot be synthesized because of their polar epistemological stances, others develop compatibility of methods as their main focus. Arguments that the incompatibility thesis presents cannot be dismissed. However, discrepancies should prompt the researcher to probe particular issues in greater depth. This process may expand knowledge about evaluation in terms of increasing the likelihood of audiences engaging in their own knowledge expansion. In the practice of evaluation, the evaluator should be aware of the various qualitative and quantitative methods to make the evaluation a process of identifying, educating, and communicating the perspectives and concerns of the evaluator and the stakeholders to maximize the relevance and success of the evaluation and the program. (SLD)

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SYNTHESIZED APPROACHES: EXPANDING THE PERSPECTIVES AND IMPACT OF QUALITATIVE AND QUANTITATIVE EVALUATION

Mary E. Piontek

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SYNTHESIZED APPROACHES: EXPANDING THE PERSPECTIVES AND IMPACT OF QUALITATIVE AND QUANTITATIVE EVALUATION[1]

Mary E. Piontek

When I first envisioned this paper, I reflected on my limited evaluation background and looked for sustenance from my wider experience in literature and literary criticism. In integrating my eclectic background, I focused on the main theme of this year's conference, combining or synthesizing the perspectives of qualitative and quantitative philosophies and practices, which is a concern emphasized in literary criticism, in addition to evaluation. I wanted to discuss an approach that enhanced the significance of evaluation information to stakeholders/clients, increased the utilization and impact of evaluation results, and expanded the possible applications of evaluation.

However, before I could even begin the process of focusing on how the two methods/practices can work in a form to increase the significance of evaluation information to the stakeholders/clients, I had to make my way through the two basic stances surrounding the quantitative/qualitative debate. The incompatibility thesis focuses on the paradigmatic conflicts between quantitative and qualitative research and the inherent link between methods and philosophy. The proponents of the compatibility thesis support the combining of methods because they propose that the link between practice and paradigm is tenuous and that evaluation problems/questions and audiences necessitate the use of combined methods.

In this paper, I will not attempt to resolve this conflict, but rather briefly discuss each stance and look at how understanding the perspective of each can and should create critical debate that encourages inquiry instead of hostility. I will also suggest that the debate or, perhaps a better term, the discussion should continue. There is no need to consider the conflict resolved by either group. The link between paradigms and methods needs to be questioned and revised as we come to understand our values and "truths" about our perspectives. The existence of alternative and diverse viewpoints need not be

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a hostile clash of intolerant rhetoric; the diverse critical beliefs can drive us towards the common purpose of improving the field of evaluation. Open discussion can enhance the significance of evaluation information to stakeholders/clients, increase the utilization and impact of evaluation findings, and expand possible applications of evaluation. Without tolerant discussion we will alienate each other - as well as stakeholders/clients, stagnate the field, and make the development of new theories and more fruitful areas of inquiry impossible.

A critical approach should create meaning and understanding for its audiences(s) by revealing information; framing context; organizing patterns, signs, signals, and data; expanding boundaries; developing new language and voices; juxtaposing ideas/images; and by revealing social/structural interaction and cultural significance. Both qualitative and quantitative research and their corresponding epistemological philosophies should enable the evaluator/ researcher to do this.

My conceptualization of evaluation is that it is a process of systematic, collaborative inquiry that uncovers or discovers information that is open to interpretation, critique, and analysis, within varied, political, ever changing contexts. Evaluation may determine value, change, or improvement within the program or situation being evaluated and may directly or indirectly affect the decision-making process of the organization.

The goal(s) of an evaluation can encompass many aspects of a given program or situation: determining its worth and/or value, providing information for decision-making, facilitating conceptual and/or instrumental use, or educating clients about evaluation. However, unless an evaluator is able to politically and contextually analyze the setting or situation in which the program and evaluation occurs, none of these secondary goals will effectively take place.

Documentation of the context of an evaluation or organization can provide valuable information about its operation to its constituents, thereby helping them to develop their conceptualization of the program or organization and communicate assumptions, biases, and developing perspectives of both the

evaluator and the constituents (Torres, 1988). By analyzing, describing, and communicating information about the evaluation environment, the evaluator helps facilitate understanding of and action about the evaluation, its purposes, and its results: in essence, 'making sense' of the concerns of decision-makers, the program goals, the conflicts between various stakeholders, and the political nature of a program and/or evaluation (Torres, 1988, 1991).

In order to achieve this major goal of linking evaluation information to the organization's culture, the evaluator needs to employ "multiple methods in a responsive, issue raising, contextually sensitive approach" (Torres, 1991, p.196).

Some evaluators/researchers propose that the two approaches of qualitative and quantitative cannot be synthesized because of their polar epistemological stances. Others do not view the epistemological level as the determinant of method-choice and thus develop compatibility of methods as their main focus.

INCOMPATIBILITY

The incompatibility thesis focuses on the paradigm conflicts between quantitative and qualitative research and insists that there is an inherent link between methods and philosophy. Dan Bednarz, 1985, insists that the two approaches cannot be synthesized. He suggests that current discussions of synthesis overlook, ignore, or misinterpret the incompatibilities of the two approaches. The two approaches differ philosophically in terms of conceptions of data, validity, reliability, and causality, as well in the conception of social science's mission (Bednarz, 1985). He suggests that a synthesis of the two approaches would necessitate the adoption of one perspective over the other; it is logically impossible for there to be a true middle ground (Bednarz, 1985). The incompatibility thesis is further supported by John K. Smith and Lous Heshusius who suggest that the compatibility claim cannot be sustained for it ignores paradigmatic differences and confuses two definitions of 'method'. For them inquiry is not and should not be "what works" at the level of individual research procedures, but must be a clear conceptualization

of inquiry at the paradigmatic level (1986, p. 8).

The proponents of the incompatibility thesis suggest that the literature that supports the integration of perspectives overlooks the subtleties of the approaches, inappropriately interprets one perspective in terms of the other (most commonly qualitative in terms of quantitative), and inappropriately assumes that the two philosophies/epistemologies are stable in nature (Bednarz, 1985).

COMPATIBILITY

The compatibility thesis supports the combining of methods. Proponents present the link between practice and paradigm (qualitative/interpretive, quantitative/positivism) as tenuous (Addis, 1987; Brannen, 1992; Bryman, 1992; Brewer and Hunter, 1989; Fetterman, 1989; Firestone, 1986; Hammersley, 1992; Hillocks, 1992; Howe, 1988; Reichardt and Cook, 1979; Weinholtz et. al., 1992). However, there are many different thoughts among these proponents as to why compatibility or synthesis may be possible. A few perspectives are discussed here.

Gregg Addis supports the combined use of qualitative and quantitative methods in educational research stating that "educational research must not pursue a monolithic form of research in which only qualitative or quantitative research is performed" (1987, p. 13). In discussing Morgan 1983, he points out that each form offers insight that the other cannot generate. He suggests that educational researchers must focus on the research problem to determine the optimal design, which may or may not include both methods. The design should reflect the" particular and unique reality" of the problem (Addis, 1987, pp. 21-2). He suggests that the debate over the philosophical differences should perhaps be seen as "no mutual exclusions between Idealism and Realism. Maybe both systems of thought are 'true' descriptions of reality...Perhaps reality is subjective: Objects are a reflection of the mind, and reality is objective: objects are distinct and independent from the mind" (Addis, 1987, pp. 20-21).

Martyn Hammersley argues that the distinction between qualitative and quantitative is of limited use for it does not capture the full range of

options for inquiry. The diversity of social research cannot be encompassed in many paradigms, let alone within two. In discussing seven issues of social inquiry, Hammersley suggests that it is not a simple contrast between two opposed standpoints, but "a range of positions sometimes located on more than one dimension" (1992, p. 51).

He further believes that "there is no necessary relationship between adopting a particular position on one issue and specific positions on another. Many combinations are quite reasonable...the purposes and circumstances of research should be determinants of selection among positions rather than being derived from methodological or philosophical commitments"(Hammersley, 1992, p. 51).

Similarly, David Fetterman (1989) uses an university evaluation to illustrate the advantages of a mix of qualitative and quantitative approaches. He suggests that combining the quantitative and qualitative approaches enhances the usefulness and accuracy of the evaluation by more clearly illuminating the process and outcome of a study. He doubts that a study can be conducted well without the combined use of both methods. Because of their educational and evaluation experiences, evaluators most often have a predisposition toward the use of one method-type. However, as Fetterman states "the evaluator's predisposition and the dominance of an approach in a given study does not suggest exclusivity, lack of rigor, or the complete absence of any other approach" (1989, p. 1). Instead of focusing on the philosophy or "the intrinsic value" of any approach, the nature of the research/evaluation problem and the audience should determine the best way to collect and present findings (Fetterman, 1989).

The combination of the two methods can enhance the utility and accuracy of the evaluation by capturing an accurate portrayal of events and participants (Brannen, 1992; Bryman, 1992; Eisner, 1991; Fetterman, 1989; Firestone, 1986; Hillocks, 1992; Kidder and Fine, 1987; Reichardt and Cook, 1979; Smith, M.L., 1986; Sprague and Zimmerman, 1989; Wallen, 1989). For instance, the combination of methods can enhance the impact of an university evaluation

(Fetterman, 1989), as well as strengthen the external validity in the licensing of health care professionals (Gothler, 1992). Qualitative data can help to illustrate the sometimes ambiguous or misleading results of quantitative studies and help develop connections with previous research, as well as provide direction for future research (Weinholtz, 1992).

In his discussion of reconciling the qualitative and quantitative in literary research, George Hillocks, Jr. states that the extreme polarities are not a viable position. Quantitative researchers use interpretive methods in problem finding, in the explanation of the relationship of data to claims, in theory building, and in explaining particular cases in connection with established knowledge and theory (Hillocks, 1992). Both the qualitative and quantitative researcher needs to explain procedures, verify observations, and cross-check sources. Their methods are quite similar for generalizing/sample size considerations and each approach prediction - just in a different way (Hillocks, 1992).

Hillocks does point out that the two types of research can and do focus on different kinds of problems; however he does suggest that the findings and claims can be synthesized through the use of ordinary argument:

> However the methods are more than complementary in the general sense of enabling researchers to deal with different kinds of problems [and]...no single conception of science is necessary for differing research methodologies to be used successfully in a complementary fashion...although the methods used to describe claims may be in conflict, the claims themselves are not - or at least not necessarily so... claims derived from quite different research methods can be used in a complimentary way to establish or disestablish propositions and theories (1992, pp. 61-63).

He goes on to suggest that in literacy research (and I would argue in evaluation as well) it is important to establish what appears to be objective and interpret these findings to give them meaning and significance, to do so necessitates the use of both sets of assumptions or methods. Hillocks asks us "Is it not possible that our divergent assumptions about objective reality simply represent different metaphors about our relationship to reality, and that both have validity under certain sets of conditions?"(1992, p. 64).

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William A. Firestone argues that the connection between method and research paradigm is not so much logical as it is rhetorical (1986). The language used expresses the assumptions of the phenomenological paradigm. While rhetorically different the results of the two methodologies can be complementary; there is an aesthetic connection between method and paradigm (Firestone, 1986).

The purist and the pragmatist each has her different view and uses the corresponding quantitative or qualitative rhetorical devices to present " a different view of the phenomenon studied and uses different means to persuade the reader of the validity of the conclusions drawn" (Firestone, 1986, p. 1). "Yet, the are not antithetical. They can present the reader with different kind of information and can be used to triangulate to gain greater confidence in one's own conclusions" (Firestone, 1986, p. 1).

Scientific writing is standardized, bare, and limited in rhetorical excess. Its apparent absence of style is in effect a rhetorical device in itself. It has persuasive power in that it tries to convince the reader of the objectivity and singularity of meaning. Elaboration builds reference to some larger meaning, rich in multiplicity of meaning (Firestone, 1986). While quantitative and qualitative studies use different strategies to persuade readers of their validity and provide different assumptions about phenomena, they also provide complementary information to the readers; quantitative develops the magnitude of relationships, and qualitative provides concrete description of detail, active process, and audiences' perspectives (Firestone 1986).

However, this does not suggest that evaluators or researchers do not have philosophical or epistemological beliefs behind choosing a particular method or that the methods are completely interchangeable. As Firestone states

> these rhetorical differences in method do not negate the view that there are instrumental reasons for choosing particular methods in specific situations...Each method type does provide different kinds of information. Their strengths and weaknesses are complementary...Thus, each can make a contribution to a reader who is concerned about the subject of study without being firmly committed to either paradigm...while there are a number of reasons for selecting a methodological approach, one's decision

> often expresses values about what the world is like, how one ought to understand it, and what the most important threats to understanding are (1986, p. 16).

In practice it is unusual for philosophy or epistemology to be the only determinant of methods. Research projects are influenced, but not automatically determined by philosophy (Brannen, 1992). Julia Brannen questions "as to how far epistemological issues in practice determine methods..the converse may also be posed, namely whether the use of a particular method inevitably means that a particular epistemological position has been adopted..there is no necessary or one-to-one correspondence between epistemology and methods"(1992, p. 15).

CONTINUING THE DISCUSSION

Although I do not support the incompatibility thesis, I importantly do not dismiss the arguments it presents. Much of the literature focusing on synthesis does fail to address the epistemological differences between the qualitative and quantitative paradigms and only discusses combining the two approaches at the application of individual procedures. (Although here I have tried to choose examples of compatibility discussants who do discuss epistemological issues.) Interestingly, documenting the compatibility of methods at the application level can drive discussion of epistemological positions and their influences on social enquiry (Brannen, 1992).

We seek to understand society at both the macro- and micro-level, yet one research method cannot address both levels of inquiry. "In so far as the findings which result from different methods are at odds or conflict with one another, these seeming contradictions ought to be addressed by the researchers in their interpretation of the data and the linkages they make between methods, data, and theory. Discrepancies should also prompt the researcher to probe particular issues in greater depth. In their own right, these may lead to new theories and more fruitful areas of enquiry" (Brannen, 1992, p. 17). This process may expand knowledge about evaluation in terms of increasing the likelihood of audiences engaging in their own knowledge expansion through different ways of knowing or approaching qualitative and quantitative information.

We cannot close off the possibility of creative generation of new theories

or research avenues because of hostile and unproductive debates. We must try to address our seeming contradictions and in doing so begin to develop a language and writing style that can encompass these linkages. The compatibilist view admits that social research needs to use a vocabulary appropriate for describing social events, "which means using intentionalist ('ontologically qualitative') concepts"; however quantification is also needed and necessary to understand society (Howe, 1988, p. 14). The use of Giddens' notion of the "double hermeneutic" in a working back and forth between "the technical, scientific vocabulary of social science and the wordaday natural vocabulary of social conduct" which moves from specific/local/near detail to global/distant structure may be a starting point for such language development (Howe, 1988, p. 14).

In the practice of evaluation, the evaluator should be aware of the various qualitative and quantitative methods that best elicit informative relevant to the evaluation. The evaluation should be a process of identifying, educating, and communicating the perspectives and concerns of both the evaluator and the stakeholders to maximize the relevancy and success of the evaluation and the program.

John K. Smith and Lous Heshusius, proponents of the incompatibility thesis, believe that the "conversation" or discussion needs to be kept open in order to more fully discuss the issue of objectivism versus realism (1986). This call to keep the conversation open is indeed echoed by proponents of combining the two methods as well. Debate should and must continue about the relative usefulness of different methods to study specific problems/situations (Reichardt and Cook, 1979).

"One of the central concerns behind incompatibilism is legitimate: To the extent that preoccupation with methods prompts unreflectiveness and stifles progress, educational researchers ought to be pressed to take a look at deeper epistemological issues" (Howe, 1988,p. 13-14) However, this should not equal a forced choice between the two paradigms.

Diane Stephens and P. David Pearson, in discussing literary criticism and

perspectives, suggest that by understanding an opposing or, as I prefer a less hostile term, alternative critical perspective we gain a fuller and richer understanding of our own perspective through critical reflection (1992). By becoming tolerant and appreciative of the knowledge engendered by diverse perspectives, we can move the field, as well as ourselves and others - especially stakeholders and clients, towards a better understanding of evaluation. What Stephens and Pearson propose for literary criticism should also be heeded by evaluators; by understanding alternative viewpoints we improve our ability to use multiple methods, we come to share a common interest in improving the field, and we ensure and perpetuate the need for dialogue and creative research (1992). The tension between the paradigms should drive inquiry rather than "reify sides in hostile debates" (1992, p. 354). "Tolerance must be the ethical principle underlying all our work. Tolerance permits us to recognize, respect, learn from, and celebrate the diversity of perspectives that our literary [and I would add evaluation] community offers" (Stephens and Pearson, 1992, p. 350).

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